Partners / Soci

Giulia Annovazzi — Stefano Lorenzoni

Consultants / Consulenti

# Stefano Lorenzoni	Ruth Almaraz Palmero **
# * Giorgio Manetti	Domenico Martinelli **
# * Giorgio Milani	Paola Garatti #
# * Beatrice Fisauli	Sonia Pesenti #
* Stefano Grimaldi	Rosanna Spinelli #
** Alberto Savi	Fabrizia Scansani #

* *Patent attorney / Mandatario brevetti* — # *Trade mark attorney / Mandatario marchi* — ** *Attorney at law/Legal Consultant / Avvocato/Consulente Legale*

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EUROPEAN PATENT OFFICE
International Preliminary Examining Authority
P.B. 5818 - Patentlaan 2
2280 HV Rijsvijk
The Netherlands

Our ref.: 18916

Via Facsimile and Courier

Milan, 19th September 2005

Re: International Patent Application PCT/IB2004/002497
Tecno Coating Engineering S.r.l.

Dear Sirs,

This is in reply to the International Preliminary Report on Patentability dated 27 May 2005.

Having regard to the comments in the above Report amended patent claims are filed in replacement of former claims together with the manuscript of the amended claims.

The amendment in claim 1 can be based on claim on claim 1 now on file, claim 6 as originally filed and the description, page 10, lines 9-10.

Claims 13, 14, 25 and 26 now on file has been deleted.

As it is known from the well-known theory of lamination, at some level between the two surfaces of a film there is a "neutral" plane where the film is free from internal stress.

Let us consider a film, sheet or beam having a rectilinear axle and uniform section in which every section of the film, sheet or beam is stressed with a bending moment having constant value. When a film, sheet or beam is bent by a moment exerted on the film sheet or beam, the film, sheet or beam is curved. We can imagine that the said film, sheet or beam is constituted by layers. The layers that are in the external part of the curving become shorter (compressed layers), whereas the layers that are in the internal part of the curving become longer (stretched layers). However, there is one layer that becomes neither shorter nor longer the length of the said layer remains unchanged. The latter layer lies in the so-called "neutral plane".

Novelty

In the first embodiment of D1 (i.e. EP 800 915) it is disclosed a film that is a seven-layer structure. The core layer or central layer is made up of ethylene vinyl alcohol copolymer. According to D1, the said layer is an oxygen barrier layer (see column 7, lines 49-50). Disposed in contact with either surface of EVOH copolymer layer are layers of a nylon.

The films of the present invention are EVOH copolymer free and exhibit an adhesive layer instead of a barrier layer as central layer (layer D).

In view of the above differences, the films as now claimed in amended claim 1 are novel over D1 disclosure.

Inventive Step

The films of the present invention also involve an inventive step over the teaching of D1 in view of a different problem solved and structure.

The multilayer films according to D1 exhibit a central layer. The said central layer only works as a barrier layer. The said layer is made up of EVOH copolymers as mentioned above.

D1 teaches that the purpose of the further layers made up of nylon is to protect the EVOH layer that exhibits poor mechanical properties, whereas amorphous polyamides exhibit favourable physical properties (column 1, lines 50 to 59 and column 1, lines 1-3). Suitable amorphous polyamides described in D1 exhibit flexural modulus values (i.e. Young's modulus values or modulus of elasticity) of 416,000 psi, i.e. about 2868 MPa (column 8, lines 58-59, and column 9, lines 1-15). Said value of flexural elastic modulus (FEM) is lower than the values of FEM of the polyamides that make up of the film according to the invention as now claimed.

We acknowledge that according to D1 the amorphous polyamide can be blended with crystalline polyamide. However, the ratio between the amorphous polyamide and the crystalline polyamide is described nowhere. Hence, D1 teaches and hints nowhere that the polyamide layers exhibit a flexural elastic modulus higher than 3500 MPa.

The films of the present invention are not based on the same principle as the D1 films. In fact, the former do not exhibit a mere replacement of EVOH copolymers with similar copolymers without modifying the film structure.

Contrary to the films of the said prior art, as mentioned above the films according to the present invention do not exhibit a barrier layer as central layer and the further layers are not used for protecting the barrier layer. But the polyamide layers themselves work as barrier layers. Furthermore, the said layers are made up of a material with good mechanical properties, therefore there is no need to protect the barrier layer with further layers.

The said structure and polymers with said properties are not taught nor hint by D1 disclosure.

Moreover, the specific structure exhibited by the films according to the present invention leads to solve the problem of curling that occurs on layered or laminated structures if the sum of the moments exerted by each individual layer in relation to the laminated neutral plane during shrinking is anything other than zero. Layers made up of high modulus polymers generally exert a membrane force that is considerably higher than the layers made up of low modulus polymers. Such a force arises due to the fact that the shrinkage of each individual layer is partially impeded by the action of the other layers in the laminate. Particularly, the force exerted by an individual layer is known to depend on the Young's modulus of the polymer making up that layer, its thickness, and the extent to which shrinking is impeded. Thus (from the theory of elasticity) the force exerted is equal to the product of the Young's modulus by the thickness of the laminate and by the shrinking impeded, expressed as a percentage. However, the moment exerted on the laminate depends on the distance of each

layer from the neutral plane of the laminate, since the moment is equal to the product of the membrane force by said distance of said layer from said neutral plane. As a result, a layer made up of a high modulus polymer, positioned about the neutral plane will not cause any imbalance in the laminate, whereas if said high modulus layer is positioned on the surface of the laminate itself, the imbalance that said layer causes will be at its maximum.

Nevertheless where, as in the present invention, one wishes to put a high modulus layer exactly at the surface of the laminate to increase mechanical strength and weldability, the laminate can be rebalanced by inserting at least two other high modulus layers, positioned on the opposite side of the neutral plane.

Since the films as claimed exhibit a substantially symmetrical structure, they do not curl.

The D1 document does not face the said problem and does not teach how to solve the curling effect in a multilayered film.

In view of the above we deem that the films according to the present invention are not made obvious by D1.

Lack of Unity of Invention

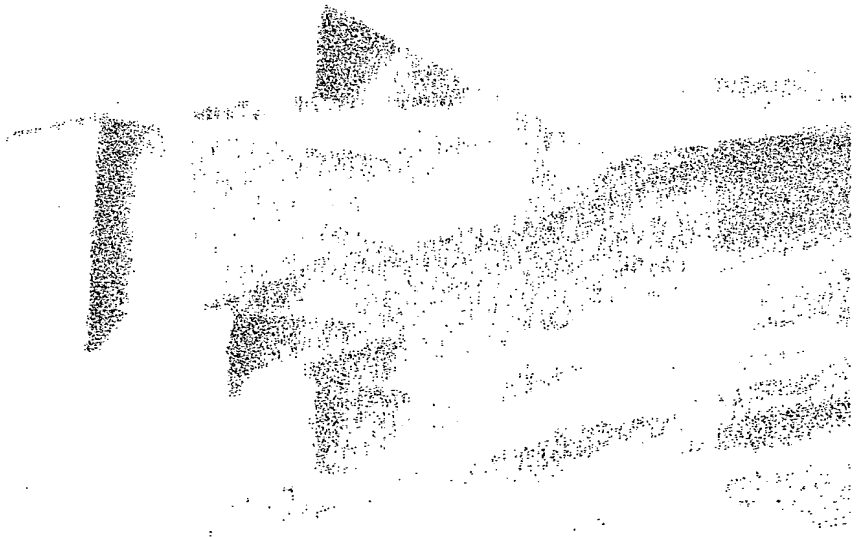
In view of the new set of amended claims, we deem that the objection is overcome.

Patent Representative

Beatrice Fisauli

Beatrice Fisauli
No. 127830 on the list of professional
representatives before the EPO

Encs.:
- Amended set of claims 1 to 21 (typewritten and handwritten)



AMENDED CLAIMS

1. Shrink film for wrapping foodstuffs, comprising seven layers (A, B, C, D, E, F and G), starting from the layer that in use is in contact with the product, composed as follows:

   - layer A, thickness 10 to 30%, welding layer – constitutes the internal part of the wrapping, and can be constituted by ionomers containing zinc or sodium, a low-density polyethylene or linear low-density polyethylene (LDPE/LLDPE), or an ethylene or octene plastomer;
   - layer B, thickness 5 to 15%, first adhesive layer – consists of an adhesive polymer selected from among terionomers, or ethylene modified with maleic anhydride copolymers, or an EVA/ethylene methacrylic acid copolymer;
   - layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among PA 6, PA 6/66, amorphous or aliphatic PA or a mixture thereof, possibly with the addition of terionomers;
   - layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among terionomers, or ethylene modified with maleic anhydride copolymers, or of an EVA/ethylene methacrylic acid copolymer, and may be equal to or different from layer B;
   - layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among PA 6, PA 6/66, amorphous or aliphatic PA or a mixture thereof, possibly with the addition of terionomers, and may be equal to or different from layer C;
   - layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among terionomers, or ethylene modified with maleic anhydride copolymers, or of an EVA/ethylene methacrylic acid copolymer,

and may be equal to or different from layers B and D;

- layer G, thickness 5 to 25%, outer layer and fourth barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among PA 6 or PA 6/66;

wherein

- three layers constituted by polymers having a Young's modulus substantially higher than that of the polymers which constitute the other layers;
- one of said three layers with a higher Young's modulus is one of the two outer layer of the film, whereas the other two layers with a higher Young's modulus are on inner layer of the film;
- each of said three layers with a higher Young's modulus is separated from the other layers with a higher Young's modulus by at least one layer with a lower Young's modulus; and

said three layers with a higher Young's modulus are highly impermeable to gases, especially oxygen and aqueous steam and are constituted by polymers of the polyamide family having modulus of elasticity greater than 3500 MPa; said two layers with a higher Young's modulus which are situated inside the film are located on the opposite side, in relation to the neutral plane of the film, from the layer with a higher Young's modulus which lies on the outside of the film.

2. Film as claimed in claim 1, characterised in that the sequence of all the layers constituting said film, and their thickness, from which the distance of each of said layers from the neutral plane of said film derives, are determined in such a way that the sum of the moments exerted by said layers in relation to said neutral plane after the process of biaxial orientation is substantially nil, wherein:

- the moment exerted by a single layer in relation to the neutral plane is equal to the product of the membrane force exerted by said layer and the distance

of the average plane of said layer from the neutral plane of the film;

- the membrane force exerted by said layer is equal to the product of the Young's modulus of the material which constitutes said layer, the thickness of said layer and the prevented shrinkage, expressed as a percentage.

3. Film as claimed in claims 1 and 2 characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 5 to 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

4. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous

steam) – consists of a mixture of polyamides PA 6/66 and aliphatic PA;

- said layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

5. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA blended with a terionomer;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

6. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA;
- said layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

7. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous

steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA blended with a terionomer;

- said layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

8. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of an aliphatic PA polymer;
- said layer F, thickness 5 to 15%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

9. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by an ethylene or octene plastomer
- said layer B, thickness 5 to 15%, first adhesive layer – consists of LLDPE

modified with maleic anhydride;

- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA;
- layer D, thickness 10 to 20%, second adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 5 to 15%, third adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

10. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by LLDPE;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous
- steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- layer F, thickness 5 to 15%, third adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

11. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 10 to 30%, welding layer – constitutes the inner part of the wrapping, and is constituted by LDPE;
- said layer B, thickness 5 to 15%, first adhesive layer – consists of an EVA/ethylene methacrylic acid copolymer;
- said layer C, thickness 10 to 20%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + PA 6;
- said layer D, thickness 10 to 20%, second adhesive layer – consists of an EVA/ethylene methacrylic acid copolymer;
- said layer E, thickness 10 to 20%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 5 to 15%, third adhesive layer – consists of an EVA/ethylene methacrylic acid copolymer;
- said layer G, thickness 5 to 25%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

12. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and can be constituted by ionomers containing zinc or sodium, a low-density polyethylene or linear low-density polyethylene (LDPE/LLDPE), or an ethylene or octene plastomer;
- said layer B, thickness 10%, first adhesive layer – consists of an adhesive polymer selected from among ethylene copolymers or terionomers modified with maleic anhydride, or of an EVA/ethylene methacrylic acid copolymer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among PA 6, PA 6/66, amorphous or aliphatic PA or a mixture thereof, possibly with the addition of

terionomers;

- said layer D, thickness 15%, second adhesive layer – consists of an adhesive polymer selected from among terionomers, or ethylene modified with maleic anhydride copolymers, or of an EVA/ethylene methacrylic acid copolymer, and may be equal to or different from layer B;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among PA 6, PA 6/66, amorphous or aliphatic PA or a mixture thereof, possibly with the addition of terionomers, and may be equal to or different from layer C;
- said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among terionomers, or ethylene modified with maleic anhydride copolymers, or of an EVA/ethylene methacrylic acid copolymer, and may be equal to or different from layers B and D;
- said layer G, thickness 15%, outer layer and fourth barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among PA 6 and PA 6/66.

13. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 15%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;

- said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

14. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + aliphatic PA;
- said layer D, thickness 15%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

15. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA blended with a terionomer;
- said layer D, thickness 15%, second adhesive layer – consists of an

adhesive polymer selected from among the terionomers;

- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

16. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 15%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA;
- said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

17. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) –

consists of a polyamide polymer selected from among polyamides PA 6/66;

- said layer D, thickness 15%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA blended with a terionomer;
- said said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

18. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by ionomers containing zinc or sodium;
- said layer B, thickness 10%, first adhesive layer – consists of a terionomer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a polyamide polymer selected from among polyamides PA 6/66;
- said layer D, thickness 15%, second adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of an aliphatic PA polymer;
- said layer F, thickness 10%, third adhesive layer – consists of an adhesive polymer selected from among the terionomers;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

19. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the

wrapping, and is constituted by an ethylene or octene plastomer;

- said layer B, thickness 10%, first adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA;
- said layer D, thickness 15%, second adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 10%, third adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

20. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by LLDPE;
- said layer B, thickness 10%, first adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + amorphous PA;
- said layer D, thickness 15%, second adhesive layer – consists of LLDPE modified with maleic anhydride;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 10%, third adhesive layer – consists of LLDPE modified with maleic anhydride;

- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.

21. Film as claimed in claims 1 and 2, characterised in that

- said layer A, thickness 20%, welding layer – constitutes the inner part of the wrapping, and is constituted by LDPE;
- said layer B, thickness 10%, first adhesive layer – consists of an EVA/ethylene methacrylic acid copolymer;
- said layer C, thickness 15%, first barrier layer (mainly to aqueous steam) – consists of a mixture of polyamides PA 6/66 + PA 6;
- said layer D, thickness 15%, second adhesive layer – consists of an EVA/ethylene methacrylic acid copolymer;
- said layer E, thickness 15%, second barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66;
- said layer F, thickness 10%, third adhesive layer – consists of an EVA/ethylene methacrylic acid copolymer;
- said layer G, thickness 15%, outer layer and third barrier layer (mainly to aqueous steam) – consists of a polyamide polymer PA 6/66.